

Abstract

The silicon carbide-based catalyst body of the present invention is a silicon carbide-based catalyst body comprising: a porous honeycomb structure wherein silicon carbide particles as the aggregate thereof are bonded to one another with pores held among them, and a catalyst loaded on the surface of the porous honeycomb structure, containing alumina and ceria as main components, wherein the catalyst is loaded on the surface of the porous honeycomb structure via a film comprising a silicon-containing oxide and the film contains oxygen in an amount of 2 to 10% by mass of the total elements constituting the porous honeycomb structure. The silicon carbide-based catalyst body is free from whitening or failure even when it is exposed to high temperatures during the regeneration or the like, and is excellent in heat resistance.